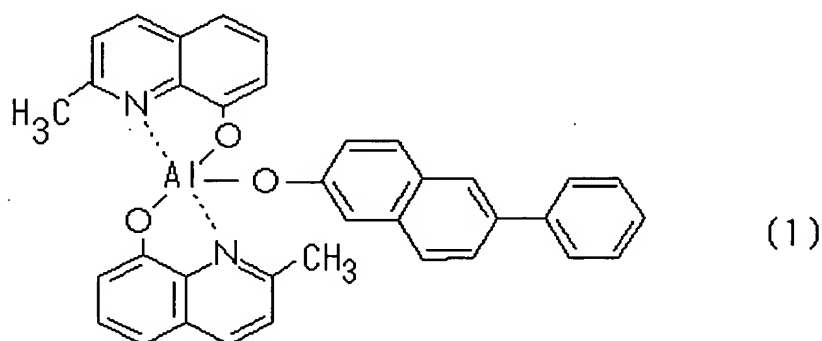


## CLAIMS

1. An organic electroluminescence device comprising: an anode; a hole transport layer comprising an organic compound; a light emitting layer having an organic compound; an electron transport layer having an organic compound; and a cathode which are stacked, characterized in that the light emitting layer includes an organic host material represented by the following structural formula (1):

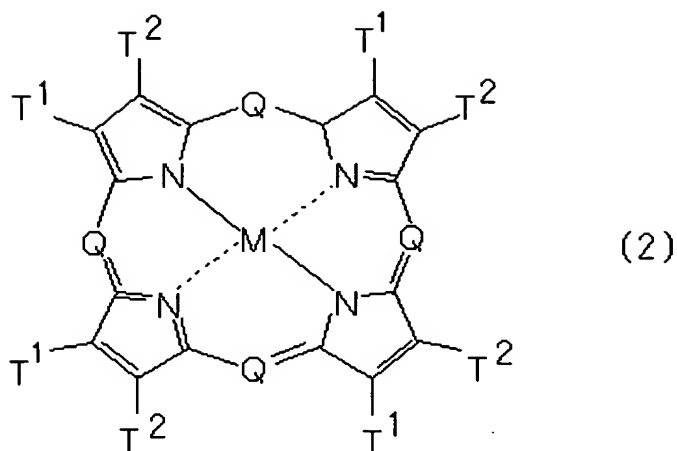


and a phosphorescent organic guest material.

2. An organic electroluminescence device according to claim 1, wherein a hole injection layer is provided between the anode and the hole transportation.

3. An organic electroluminescence device according to claim 1 or claim 2, wherein an electron injection layer is provided between the cathode and the electron transport layer.

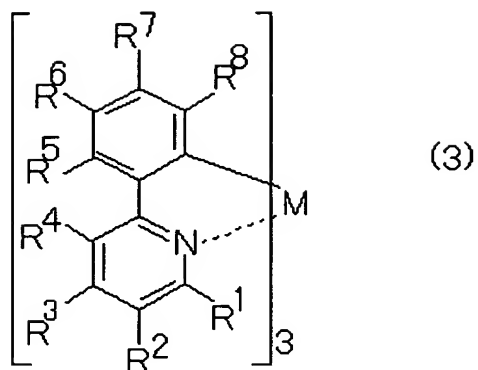
4. An organic electroluminescence device according to any one of claims 1 to 3, wherein the phosphorescent organic guest material comprises a porphyrin compound represented by the following structural formula (2):



(in the structural formula (2), Q represents  $-N=$  or  $-C(R)=$ , M represents a metal, a metal oxide, or a metal halide, R represents hydrogen, alkyl, aralkyl, aryl or alkaryl, or a halogenated substituent thereof,  $T^1$  and  $T^2$  each represents hydrogen or alkyl, or jointly represent a completed unsaturated six-membered ring including a halogen substituent, the six-membered ring is formed of carbon, sulfur and nitrogen ring atoms, and the alkyl moiety contains 1 to 6 carbon atoms).

5. An organic electroluminescence device according to claim 4, wherein M in the phosphorescent organic guest material is platinum.

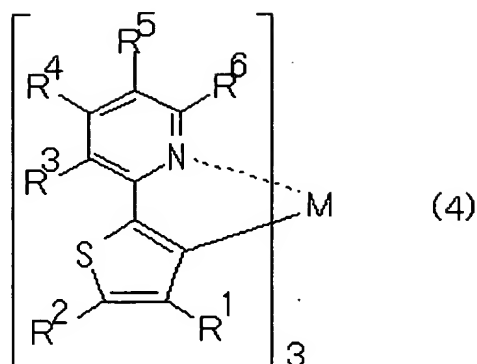
6. An organic electroluminescence device according to any one of claims 1 to 3, wherein the phosphorescent organic guest material comprises a compound represented by the following structural formula (3):



(in the structural formula (3), M represents a metal,  $R^1$  to  $R^8$  each independently includes a hydrogen atom, alkyl group, oxy group, amino group or a hydrocarbon group having at least one carbon atom in the substituent, the number of carbon atoms is 1 to 10 in each of the hydrocarbon moieties, further,  $R^1$  to  $R^8$  can be selected independently from cyano, halogen, and  $\alpha$ -haloalkyl,  $\alpha$ -haloalkoxy, amide, sulfonyl, carbonyl, carbonyloxy and oxycarbonyl substituents containing 10 or less carbon atoms, and further,  $R^1$  together with  $R^2$ ,  $R^2$  together with  $R^3$ ,  $R^3$  together with  $R^4$ ,  $R^5$  together with  $R^6$ ,  $R^6$  together with  $R^7$ , or  $R^7$  together with  $R^8$  can form a condensed benzo ring).

7. An organic electroluminescence device according to claim 6, wherein M in the phosphorescent organic guest material is iridium.

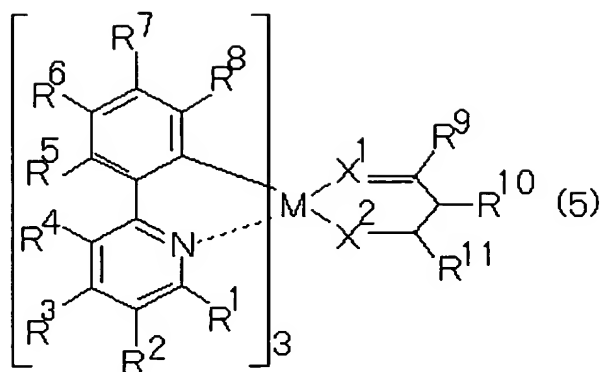
8. An organic electroluminescence device according to any one of claims 1 to 3, wherein the phosphorescent organic guest material comprises a compound represented by the following structural formula (4):



(in the structural formula (4), M represents a metal, R<sup>1</sup> to R<sup>6</sup> each independently includes a hydrogen atom, alkyl group, oxy group, amino group or a hydrocarbon group having at least one carbon atom in the substituent, the number of carbon atoms is 1 to 10 in each of the hydrocarbon moieties, further, R<sup>1</sup> to R<sup>6</sup> can be selected independently from cyano, halogen, and  $\alpha$ -haloalkyl,  $\alpha$ -haloalkoxy, amide, sulfonyl, carbonyl, carbonyloxy and oxycarbonyl substituents containing 10 or less carbon atoms and, further, R<sup>1</sup> together with R<sup>2</sup>, R<sup>3</sup> together with R<sup>4</sup>, R<sup>4</sup> together with R<sup>5</sup>, or R<sup>5</sup> together with R<sup>6</sup> can form a condensed benzo ring).

9. An organic electroluminescence device according to claim 8, wherein M in the phosphorescent organic guest material is iridium.

10. An organic electroluminescence device according to any one of claims 1 to 3, wherein the phosphorescent organic guest material comprises a compound represented by the following structural formula (5):

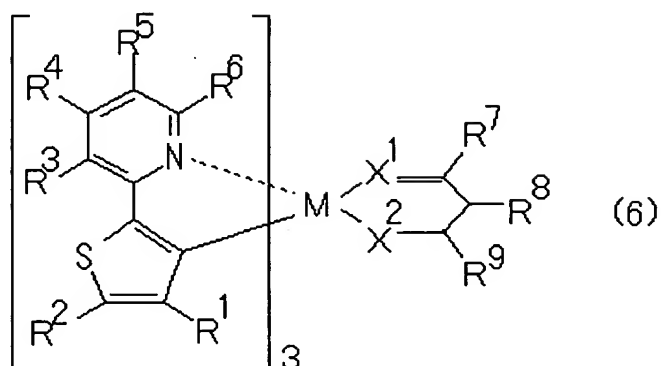


(in the structural formula (5), M represents a metal,  $X^1$  and  $X^2$  each independently represents an oxygen atom or a sulfur atom,  $R^1$  to  $R^{11}$  each independently includes a hydrogen atom, alkyl group, oxy group, amino group, or a hydrocarbon group having at least one carbon atom in the substituent, the number of carbon atoms is 1 to 10 in each of the hydrocarbon moieties, further,  $R^1$  to  $R^{11}$  can be selected independently from cyano, halogen, and  $\alpha$ -haloalkyl,  $\alpha$ -haloalkoxy, amide, sulfonyl, carbonyl, carbonyloxy and oxycarbonyl substituents containing 10 or less carbon atoms and, further,  $R^1$  together with  $R^2$ ,  $R^2$  together with  $R^3$ ,  $R^3$  together with  $R^4$ ,  $R^5$  together with  $R^6$ ,  $R^6$  together with  $R^7$ ,  $R^7$  together with  $R^8$ , or  $R^8$  together with  $R^9$  can form a condensed benzo ring).

11. An organic electroluminescence device according to claim 10, wherein M for the phosphorescent organic guest material is iridium.

12. An organic electroluminescence device according to any one of claims 1 to 3, where in phosphorescent organic guest

material comprises a compound represented by the following structural formula (6):



(in the structural formula (6), M represents a metal, X<sup>1</sup> and X<sup>2</sup> each independently represents an oxygen atom or a sulfur atom, R<sup>1</sup> to R<sup>9</sup> each independently includes a hydrogen atom, alkyl group, oxy group, amino group or a hydrocarbon group having at least one carbon atom in the substituent, the number of carbon atoms is 1 to 10 in each of the hydrocarbon moieties, further, R<sup>1</sup> to R<sup>9</sup> can be selected independently from cyano, halogen, and  $\alpha$ -haloalkyl,  $\alpha$ -haloalkoxy, amide, sulfonyl, carbonyl, carbonyloxy and oxycarbonyl substituents containing 10 or less of carbon atoms and, further, R<sup>1</sup> together with R<sup>2</sup>, R<sup>3</sup> together with R<sup>4</sup>, R<sup>4</sup> together with R<sup>5</sup>, R<sup>5</sup> together with R<sup>6</sup>, R<sup>7</sup> together with R<sup>8</sup>, R<sup>8</sup> together with R<sup>9</sup>, R<sup>9</sup> together with R<sup>10</sup>, or R<sup>10</sup> together with R<sup>11</sup> can form a condensed benzo ring).

13. An organic electroluminescence device according to claim 12, wherein M in the phosphorescent organic guest material is iridium.

14. A material for an organic electric field light emitting device material which is a compound represented by the following structural material (1):

